# U.S. ENVIRONMENTAL PROTECTION AGENCY INITIAL/FINAL POLLUTION REPORT

**DATE:** March 25, 2004

**SUBJECT:** Wise Alloys Paraffin Oil Spill

**FROM:** Glenn Adams, OSC

**USEPA Region 4** 

**TO:** S. Hitchcock, Chief ERRB, EPA

D. Rigger, ERS, EPA

Region 4, RRC Jeremy Sims, ADEM

#### I. BACKGROUND

FPN# NONE SITE ID: NONE PROJECT CEILING: N/A

LEAD AGENCY: EPA, Region 4, ERRB

61 Forsyth Street, SW

Atlanta, Georgia 30303

NPL: No FUNDING: OPA

LEAD OSC: Glenn Adams

#### II SITUATION

Date of Notification:

Date Action Started:

Pollutant:

Quantity Discharged:

Source Identification:

23MAR04

Paraffin Oil

24,000 gallons

Equipment failure

#### III ACTIONS TAKEN

On March 23, 2004, the NRC was notified (NRC#716778) of a release of 24,000 gallons of paraffin oil as a result of a heat exchange unit failure at Wise Alloys in Muscle Shoals, Colbert County, Alabama. The incident occurred over the weekend of March 20, 2004. It was discovered on March 22, 2004 at 0800 hours and it was reported on March 23, 2004 at 0900 hours. The company and ADEM reported that there was a high possibility of the oil reaching Pond Creek which leads to the Tennessee River. Secondary containment and wastewater treatment ponds on the facility property were still holding the release. However, due to the volume and the amount of oil that had been emulsified, they were expecting it to reach Pond Creek. OSC Glenn Adams was dispatched to the incident where he coordinated with USCG, ADEM, AL EMA, Colbert County EMA, and the PRP to ensure containment of the oil.

When the release occurred in the production system, the paraffin oil was mixed in with the cooling water system. The mixing caused the oil to be emulsified. The emulsified oil continued through the cooling water system and eventually drained into the Facility's waste water treatment

system. The waste water was pumped into 2 unlined ponds before entering the treatment part of the of the system. The majority of the product (approximately 80%) was collected in the unlined ponds. Some of the emulsified product would go through the pumps from the unlined ponds and go into the rest of the system. After leaving the lined ponds, flocculent was added to the waste water stream (which still included emulsified product) which flowed into the clarifying tanks where the majority of the remaining product was removed. At the point of discharge from the waste water treatment system into an unnamed tributary, containment was placed (hard boom and absorbent boom) to help prevent off-site migration of any product still in the post-treatment waste water stream. This unnamed tributary flow is diverted, in normal flow conditions, to a retention pond at the Facility boundary where the water is aerated before being discharged back to the unnamed tributary. When the unnamed tributary flows off site, it flows into Pond Creek. The distance between the waste water discharge point and Pond Creek is approximately 0.5 miles. Pond Creek flows approximately 13 miles until it discharges into the Tennessee River. Containment was also placed in the unnamed tributary near the Facility boundary, just before the confluence of Pond Creek, and on Pond Creek.

As of the time of this report, the Facility's waste water treatment system had contained almost all of the product. Vacuum trucks are being used at locations within the Facility's cooling water system, waste water treatment system, and at containment areas to remove the product from the water. There is currently no evidence that the product left the Facility's property and entered Pond Creek, but a small amount of product has reached the unnamed tributary where it is being contained and removed.

#### IV FUTURE ACTIONS

SOSC Sims will continue over-site to ensure continued containment of the oil on the facility property.

## V COSTS

N/A

### VI CONTACTS

NAME	AGENCY/ORG	PHONE NUMBER	ROLE
Glenn Adams	US EPA R-4	404-562-8771	FOSC
Caleb King	USCG - MSO Paducah	270-442-1621	initial FOSC
Jeremy Sims	ADEM	256-353-1713	SOSC
John James	AL EMA	256-332-7570	State Responder
Lance Young	Colbert Co. EMA	256-386-8558	County Responder
Paul Johnson	Wise Alloys	256-386-6320	RP Representative